



ENGINEERING STATEMENT

of

John F.X. Browne, P.E.

in regard to

Digital Allotment Facilities

of

WNIN-DT

Evansville, IN

Background

WNIN-TV operates its analog facility on Channel 9 in Evansville, IN. In the 5th Report & Order, WNIN was initially assigned Ch 54 at 1000 kW for digital operation. This would mean that WNIN would have to construct a very high power UHF facility for an interim digital operation since the assigned channel was "out-of-core". This presented a huge financial burden for this public TV station, estimated to cost nearly \$2,000,000 to construct, for a facility it would eventually abandon as its first choice would be to return to its analog Channel 9 as its permanent DTV assignment if technically feasible.

Subsequently WNIN determined that it could serve a major portion of its constituency with a VHF facility on Ch 12 provided that an authorized analog facility in Cape Girardeau, MO was provided with appropriate interference protection. WNIN petitioned the Commission to change its allotment to Channel 12 with appropriate operating parameters (involving the use of a directional antenna). The Commission approved this request with the proposed operating parameters. WNIN constructed the DTV facility on Ch 12 with maximum permissible power (30 kW ERP) and has been operating it since April, 2003.



In the facility certification stage leading up to final channel allotments, the Commission gave stations the choice of "certifying" to the coverage of either its allotted facility or an authorized maximized facility as the service to be rendered by its post-transition facility. (There were other choices for special situations not applicable to WNIN). For WNIN, the proffered choices were actually the same: it could only select its authorized and operating DTV facility on CH 12 with its highly directional antenna.

As shown in Figure 1, this authorized DTV facility does not approach "replication" of the currently authorized analog facility. (Note that the Commission, in its 1997 database, employed the parameters of the then authorized analog facilities of WNIN as a reference; subsequently, WNIN moved its analog facilities to a new site with increased height and coverage where both analog and digital facilities are now authorized and operating). The population within the Grade B contour of the authorized analog facility is 825,284, while the population within the noise-limited contour of the post transition Ch 9 digital facility is calculated to be 793,024.

Proposal

WNIN seeks to have the Commission slightly alter the parameters of its TCD in the "final" table of digital allotments so that it can replicate the service rendered by its analog facility.

Studies have been conducted in accordance with OET-69 using software which mimics that used by the Commission. It has been determined that a post-transition facility having the following parameters would replicate the authorized analog coverage:

	<u>WNIN-DT</u>
Channel	9
ERP	14 kW (non-directional)
Radiation Center	427m AMSL
HAAT	304m
Location	37° 59' 01" N. LAT 87° 16' 13" W. LONG



The WNIN-DT TCD parameters, as presently shown in the FCC table, are predicted to cause interference to several stations as follows:

1. WBNA-DT, CH8, Louisville, KY – 0.0380%
2. WILL-DT, CH9, Urbana, IL – 0.3263%
3. WISH-DT, CH9, Indianapolis, IN – 0.73339%

In each instance, the proposed facility would not increase the interference already caused to these stations by the TCD or provide new interference to any other station.

Conclusion

The proposed changes to the allotment would permit WNIN-DT to use its existing analog antenna system and transmitter (which are only several years old) for a considerable savings in cost while replicating its authorized analog coverage and, thus, maintaining its public television service to the residents of the Evansville area.

**Certification**

I hereby certify that the foregoing report or statement was prepared by me but may include work performed by others under my supervision or direction. The statements of fact contained therein are believed to be true and correct based on personal knowledge, information and belief unless otherwise stated; with respect to facts not known of my own personal knowledge, I believe them to be true and correct based on their origin from sources known to me to be generally reliable and accurate. I have prepared this document with due care and in accordance with applicable standards of professional practice.

John F.X. Browne, P.E.
August 14, 2007

John F.X. Browne & Associates P.C.

WNIN-DT TCD on CH9 compared with WNIN-TV Analog on CH9 with 316 kW Omni

WNIN-DT TCD

Latitude: 37-59-01 N
Longitude: 087-16-13 W
ERP: 30.00 kW
Channel: 9
Frequency: 207.0 MHz
AMSL Height: 409.0 m
Horiz. Pattern: Directional

WNIN-TV

BLET20030423ABK
Latitude: 37-59-01 N
Longitude: 087-16-13 W
ERP: 316.00 kW
Channel: 09+
Frequency: 189.5 MHz
AMSL Height: 427.0 m
Horiz. Pattern: Omni
Date: 08-14-2007

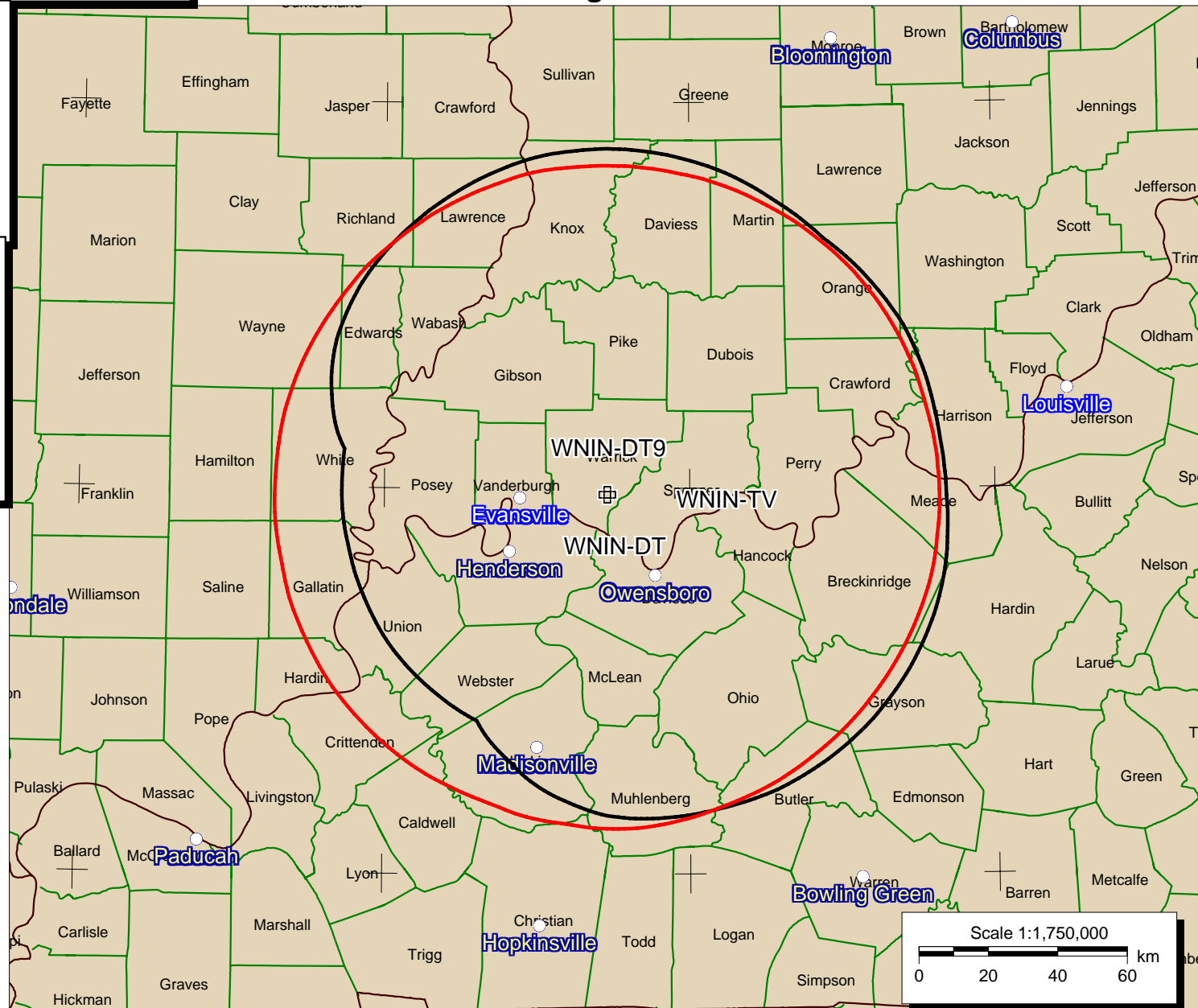


FIG.1